Section – B

(Short Answers)

Note: Answer any EIGHT of the following questions. Each question carries 05 marks.

Q.2 Explain the word Physics and define what is Physics?

Q.3 Describe briefly the main causes of Friction.

Q.4 What is the difference between real and virtual image?

Q.5 How many conditions of Equilibrium? Briefly explain.

Q.6 What is Law of Gravitation?

Q.7 How is Rainbow formed?

Q.8 To what kind of lever the following machines belong:
Door – Human arm – Forceps – Sea saw – Upper and lower jaws of mouth.

Q.9 An empty truck weight 4000 N its engine can produce a maximum acceleration of $1ms^{-2}$.

If the truck is loaded with 2000 N. Find the maximum acceleration the engine can produce.

Q.10 Drive the equation: $2aS = V_f^2 - V_i^2$

Q.11 Define reflection of light.

Q.12 Define electric current and write its equation.

Q.13 What are the defect of vision? Explain only one.

Section – C

(Descriptive Answers)

Note: Answer any TWO of the following questions. Each question carries 14 (7 + 7) marks.

Q.14 (a) How is the sound produce and what is the range of frequency of audible sound?

(b) The potential difference between two terminals is about 220 volts and the current flow is 2 amperes. Find the resistance.

Q.15 (a) Describe the anomalous expansion of water.

(b) Find the acceleration of a body whose velocity increase from $11ms^{-1}$ to $33ms^{-1}$ in 10 second.

Q.16 Write notes on any Two of the following.

(i) Mass of Earth

(ii) Archimede's Principles

(iii) Wave Motion